EMAIL COMMENT

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From: Anna Nissen [mailto:nnarch2@gmail.com]
Posted At: Friday, June 17, 2011 5:24 PM
Posted To: SW Permit Comments
Conversation: Informal Comments due 6/17/11 on Phase I Permit LID rules
Subject: Informal Comments due 6/17/11 on Phase I Permit LID rules

Sorry it took be so long to read all the May 16th, 2011 post on Phase I Muni Stormwater General Permits that pertain to LID Requirements. I offer the following comments.

I find the monitoring requirements hopelessly opaque, but note that water quality controls are next to worthless without effective monitoring.

Comments

Phase I Preliminary Draft Low Impact Development (and Monitoring) Requirements Section

Contrary to the article in Crosscut yesterday, I am generally pleased with this new draft, however:

1. Please make abundantly clear that changes in development standards are a "change in zoning." Seattle routinely "assures" citizens that major changes in development standards don't "change the zoning," meaning the classification of parcels. Especially egregious has been its recent Lowrise Multifamily Update. There is little doubt that this total rewrite of development standards along with some re-classification would have met the stormwater analysis thresholds proposed in this draft WERE they in effect, OR if special interests had not overshadowed Seattle's advanced considerations of stormwater and effective application of SEPA/GMA

2. Of utmost importance is the integrity/accuracy of the initial analysis of whether proposed land use changes meet the threshold for analysis. I don't have specific recommendations, but the need is amply proven by malarky testimony used by the Seattle Department of Development to support the Declaration of Non-significance it awarded said Lowrise Multifamly Update (Seattle Hearing examiner file W10-1--005). Please note that Seattle's lowrise multifamily zones retain the most pervious surface per parcel other than parcels in single-family zones.

3. Requirement Outline item 2b needs further attention. Current law has good requirements for the concurrent SEPA/GMA process it recommends, however, in that it is optional and lacks a required declaration of intent, Seattle does so in fact then denies intending to do so as to avoid complying with stringent procedural and substantive requirements, most significantly the evaluation of reasonable

alternatives with lesser environmental costs (Seattle Hearing examiner file W10-1--005). Adding stormwater quality requirements to the mix without fixing the existing loophole would be just a waste of time —a stringent, streamlined arrangement incorporating ALL necessary evaluations needs developing and adopting into law as necessary. Improved integration is FULLY supported by your quote of the ruling in the Explanatory Notes section.

"The PCHB Phase I ruling discussed the relationship between state water quality law and the Growth Management Act (GMA), stating that: *"We conclude that there is no conflict between GMA and WPCA [State Water Pollution Control Act], nor the roles of local governments and Ecology under these statues. These roles support and complement each other and can be harmonized to allow water quality efforts to be considered and integrated in the growth management process outlined in GMA."*

Phase I Explanatory Notes Section

4. Outlne item 3 needs further attention. "Recording and measurable targets" need to be established and incorporated in all GMA comprehensive plans in the next required update, if not sooner, so that the individual analyses associated with incremental changes in parcel classification and rewrites of development standards are co-ordinated and consistent as a whole.

5. Approach and definitions.

Ecology proposes an approach that addresses new development or re-development, either in areas where a UGA or city is expanding or where a land use action increases the total impervious area of a watershed of between 2 square miles and 40 square miles in size by a significant amount.

If the hydrologic and water quality analysis finds that the proposed UGA expansion or increased impervious area will result in residual water quality impacts, the analysis must demonstrate that the proposed changes are in the public interest so as to justify the lowering of water quality. However, while some lowering of water quality may be allowed, in no case may the actions result in a violation of state water quality standards or impairment of beneficial uses in receiving waters. For land use actions in urban areas, the public interest analysis can cite the Growth Management Act goal of concentrating growth inside UGAs. Actions are more likely to be in the public interest if they increase population inside the UGA rather than outside the UGA.

For example, in an already urbanized watershed, the targets could be to improve certain stream flow metrics by X%, reduce the loading of a chemical by Y%, reduce impervious area from 40% to 30%, and increase native land cover by 5%. In an un-impacted, healthy watershed that would be asked to accommodate a 50% increase in population, the targets could be no violations of water quality standards, maintaining flow metrics above certain values associated with healthy stream ecosystems, native ground cover of not less than 65%, and effective impervious area less than 10%.

I support this approach and think it improved in expression. However, please make sure all phrases and situations are as clear as possible. For example, "native vegetation" may mean something quite different for newly disturbed land and for redevelopment and restoration in a Phase I city. Are the plants in rain-gardens limited to "native vegetation?" I hardly think so. When

infiltration is not "practical," I lack expertize to know whether other means of filtering are adequately required. They should be. Also "minimize compaction of native soils except as needed for building purposes." In Seattle, whether necessary or not, the practice is now stripping the entire construction site with the approval, if not the encouragement of the Department of Development.

6. A seasoned architect, I concur with your caution on vegetated roofs, the initial inclusion of commercial application only, and the statement about limited stormwater runoff reduction benefits. You might have to quantify that last for doubters.

Vegetated roofs refer to roofs designed to sustain vegetation on a soil or artificial media. Vegetated roofs are used extensively in Europe. Their use is expanding on commercial buildings in the United States. Ecology considers them a proven and accepted LID technology in commercial projects, but not in residential projects. However, their costs in comparison to standard roof construction can be substantial. And their potential benefits in stormwater runoff reduction are limited.

Appendix of Minimum Technical Requirements

7. I have lost track of where it says so, but areas with combined sewer and stormwater handling systems should not be completely let off the hook. Dismissing 1/3 of the area of Seattle is inappropriate given the problems with this antiquated system that all Phase I cities of a certain age are stuck with and that very much impact surrounding marine waters. The statements of LID intent and best practices support encouraging infiltration and nature-wise gardening where ever it is practical to do so, if only to make up for proposed exceptions and the inevitable seekers of loopholes.

9. Figure 3.1: define MS4 for "the rest of us"

10. Your question on competing needs: The sure way to not cover too much of a lot is to build only that which is necessary, as opposed to allowed, and to not overzone so that excessive land costs force overbuilding during booms and otherwise, scattershot development and upzones as previously overzoned property is held off-market awaiting a "coming" boom. Especially hard to decipher are the seemingly overlapping interests of the planetary zealots and the development industry. Sages are starting to make progress on the decipher. Quite helpful has been Cedric Price's half in fun, whole in earnest metaphor of the city as an egg—at first compact and walled (hardboiled), then cracked and fried with the center of transportation (attraction) still obvious, and finally, by now, throughly scrambled. Desirable or not, the costs of unscrambling and reverting to hegemony are totally prohibitive—material costs, social costs, AND environmental costs. The sooner the industry and the zealots realize this, the better. Proponents of permaculture are quite correct, cities are part of nature, not merely surrounded by it. Hang in there.

From: Anna Nissen [mailto:nnarch2@gmail.com]
Posted At: Sunday, June 19, 2011 6:26 PM
Posted To: SW Permit Comments
Conversation: Add Trees to Comments 6/17/11, Phase I Permit LID rules
Subject: Add Trees to Comments 6/17/11, Phase I Permit LID rules

Please consider this as a P.S. to the comments that I submitted yesterday.

The high LID value of urban trees escaped my attention completely until the following arrived in my inbox today from the Linkedin Urban Forestry group

http://www.linkedin.com/groupItem?view=&srchtype=discussedNews&gid=2563716&item=56887880&type=member&trk=eml-anet_dig-b_pd-ttl-cn

"Congratulations to Philly on the EPA and PADEP approval of their Green Infrastructure Plan.

What can urban foresters do to make sure that trees are given their fair share in the plan?

Large urban trees are much cheaper to install and than large tanks and pipes, and you get multiple benefits.Also, Philly's plan is heavy on green roofs and green walls, much more expensive options when you consider cost per gallon treated. What should our actions be?

Al Key • There are many disadvantages to grey infrastructure.

1) it's more expensive: Giving everybody new pipes to comply with new federal stormwater regulations coming down the line (NPDES phase III) was going to cost Philly 12 billion dollars, as opposed to this plan which will cost 2 billion.

2) Grey infrastructure is only used when it rains. Philly get 80 days of rain per year, so the pipes lay redundant 280 days of the year. Green infrastructure stays in use regardless of weather.

3) Grey infrastructure is single purpose. there are no other benefits to pipes except water conveyance. There are many benefits to green infrastructure: urban heat island reduction, carbon sequestration, urban pollination, increased property value & etc..

Philadelphia sees this as a cost saving measure while getting much more bang for the dollars by doing more things for less money. In my experience, Trees are a much more cost effective means than green roofs for water management, if you look at cost per gallon treated.

So my question is what can urban foresters do to increase their share of the pie?"

In any case, in thinking over the material that I reviewed, I remember green roofs discussed, but other than the obvious merits of "native vegetation I do not recall new or retained trees considered as highly appropriate LID measures in urban settings.

Along with the merits of retaining and recovering absorbent soil, planting trees so they grow and thrive, as opposed to unrealistic provisions for "street" trees, are extremely cost productive. On some steep, very urban sites, well considered trees and adequate understory may be the most, if not the only effective use of low impact stormwater management funds.

I am hoping that Seattle's Urban Forestry Commission has already submitted or will submit supporting comments along these lines. http://www.ecy.wa.gov/programs/wq/forms/lidspubcomments.html

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